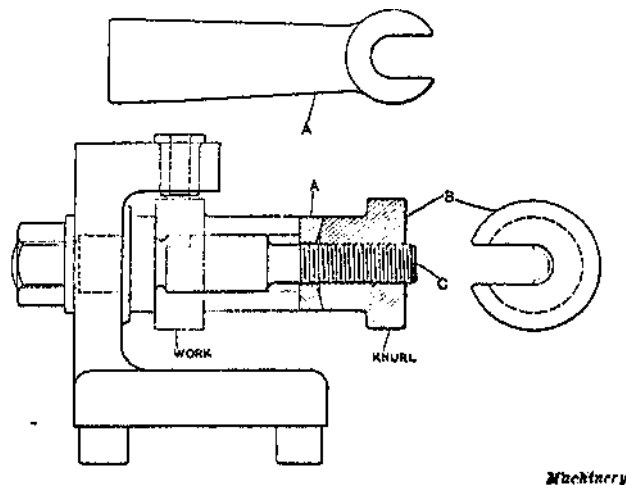


JIG DESIGN

variety of bushings of various lengths, the stud *C* being made to suit the longest piece of work. ^

Clamps that have a tendency to draw the work down firmly onto the rest-pins or stops are useful in all classes of fixtures. Fig. 4 illustrates a simple means of accomplishing this. Care should be taken to see that the stop is pivoted above the point *A*. Another and more rigid device is illustrated in Fig. 5. The plunger *A*, carried in plunger *B*, is forced down against the 45-de-gree side of stop *C*, compressing spring *D*. A fixture that clamps two clamps with a " down-and-in " pressure is illustrated in Fig. 6.



Machinery

Fig. 3. Means used for Clamping Bushing when the Work Varies in Length

Slides *B* are equalised by strap *C* and ball-and-socket washers *D* and *E*. This fixture is useful for milling and profiling, as the clamps and stops are below the surface of the work. Fig. 7 shows two down-and-in clamps equalized for holding a round piece of

bored work for a milling operation. Lever *A* is tapped to receive screw *B*, and the clamping pressure equalizes with lever *C* by means of rod *D*. Levers *A* and *C* impart a down-and-in pressure to plungers *E*. This fixture can be applied to flat work. In the double movement clamp shown in Fig. 8, the clamp *A* is carried by the hinge *B*, pivoted at *C*. Screw *E* gives clamp *A'*